WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:
Mowich River Coalbed Methane Program—One core hole

2. Name of applicant
Duncan Oil, Inc.
1777 S. Harrison Street, Penthouse 1
Denver, Colorado 98210

3. Address and phone number of applicant and contact person:
Applicant: Mr. John Bettridge
Operations Manager
Duncan Oil, Inc.
1777 S. Harrison Street, Penthouse 1
Denver, Colorado 80210
Phone: 303-759-3303

4. Date checklist prepared:
September 25, 2003

5. Agency requesting checklist:
Washington State Department of Natural Resources (DNR)

6. Proposed timing or schedule (including phasing, if applicable):
Duncan Oil proposes to begin drilling a test boring in November 2003. Drilling the 3500-foot core hole is expected to take less than 60 days to complete. Upon completion of drilling, the core hole would be plugged with concrete per state regulations and the site would be restored.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
The test boring is planned to characterize subsurface material. Based on the results of the test boring, further borings or test wells may be proposed. If additional activity beyond this test boring is needed, a new drilling permit application and SEPA checklist would be submitted.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
A Tetra Tech FW, Inc. geologist and a biologist visited the site on September 18, 2003 to investigate soil stability, wetlands or environmentally sensitive features on the site. No evidence of soil instability, wetlands or environmentally sensitive features were seen on the site.

The Washington Department of Fish and Wildlife has been contacted to query the Priority Habitat Species (PHS) database and identify any special status species and or habitats that may be in the vicinity of the drill site. Once Tetra Tech FW has received and review the PHS data, the Washington Department of Natural Resources will be contacted if the data identifies any fish or wildlife species of concern in the vicinity of the project.

Washington Department of Natural Resources, Natural Heritage Program database information has been reviewed for any special status plants that may be located in the vicinity of the site. No special status plants were shown in the vicinity of the proposed boring sites.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No.

10. List any government approvals or permits that will be needed for your proposal, if known.
DNR Oil and Gas drilling permit for the test well would be needed. The Oil and Gas drilling permit is included with this checklist.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
The core holes will be drilled from ground surface to approximately 3500 feet deep.

The drill site would be located on private timberland owned by Rainier Timber Company, LLC. The project area is shown on the vicinity map (Figure 1) and topographic map (Figure 2). The proposed coring site will occupy an area 225 feet by 175 feet during drilling. Site preparation would consist of clearing to remove vegetation and slash, and some grading to level the site. The chosen site has been recently clearcut. The sites would be surfaced with crushed rock or quarry spalls to provide a suitable drilling surface.

The coring process would use a truck-mounted drill rig, slightly larger than a standard water well rig. Drilling would be conducted 24-hours per day and 7-days per week. An on-site supervisor would be present during all drilling operations.

Coreholes, or borings, typically less than 6" diameter would be drilled to approximately 3500 foot depth to characterize subsurface materials. The aim of the drilling operation is to extract a core of subsurface material from the boring. The drilling method would involve drilling muds composed primarily of bentonite clay and polymers. Various state approved additives may be included to aid the drilling process. A surface steel casing would be installed within the boring from the surface to the first bedrock. The steel casing would be sealed with concrete to the unconsolidated surface materials surrounding the core hole to protect groundwater during drilling. Once the boring is completed and the core samples extracted, the hole would be completely filled with concrete to prevent water and gases from entering or exiting the boring.

Included with this SEPA checklist is the Oil and Gas Drilling Permit appliction, which contains a detailed engineering description of the project site layout, mud program, casing and concreting program.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The site is located on private timberland owned by Rainier Timber Company, LLC approximately 11 miles south of Carbonado, Washington off State highway 165. The core hole is located in Section 35 Township 17N Range 6E. The sites is shown on the vicinity map (Figure 1) and topographic map (Figure 2).

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, **rolling, hilly**, steep slopes, mountainous, other . . . . . .

b. What is the steepest slope on the site (approximate percent slope)? **8%**
The site is on a small bench on a larger slope. The surrounding land in the general area is rolling and hilly. The site slopes to the west and south to the Le Dout Creek drainage. See topographic map (Figure 2).

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The proposed core hole site is located within an area mapped as Jonas series: gravelly silt loam and gravelly or cobbly clay loam soils at least 60" deep. The deep, well-drained soil forms on mountain back slopes on parent material of colluvium and residuum that have an admixture of volcanic ash. This is consistent with what was seen at the site. The site is currently used as commercial timber land. The actual site is located on a bench.

The site does not include any prime farmland or wetland soils.

Sources:

1. **Soil Survey of Snoqualmie Pass Area, Parts of King and Pierce Counties, Washington. 1992. USDA Soil Conservation Service.**
2. **Site visit on September 18, 2003.**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

A Tetra Tech FW, Inc. geologist investigated the site for slope stability. No features that would suggest instability were noted within approximately 300' of the well location. Recently logged slopes of 14-16% are present across the spur road from the site. Drilling and clearing operations will be confined to the site and adjacent spur road.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

The drill site is located directly adjacent to timber harvest roads. Therefore road will not need to be constructed to access the location.

The site (not more than 0.9 acres) would be cleared and graded. One "earth sump" or reserve pit would be constructed on each site to contain the drilling fluids. It would be approximately 90 feet by 20 feet by 10 feet deep and require the excavation of approximately 670 cubic yards of soil. The excavated soil would be mounded around the perimeter of the earth sump to provide additional containment. After drilling is complete, the "earth sump" would be backfilled (with native, excavated soil) and restored to approximate pre-existing contours.

Fill would be required on the drill pads to support the drill equipment. After being cleared and graded, crushed rock or "quarry spalls" would be brought in to cover the site. The rock surface is needed to provide firm and uniform support for the drill equipment and to provide an erosion resistant surface for the working area and short access road. The crushed rock or quarry spalls would be obtained from the local project area or from a permitted quarry operation in the vicinity of the project area.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Although erosion is a natural process, it could increase as a result of the clearing associated with the proposed project. Bare soil in the vicinity of the proposed drill site may be susceptible to erosion if not mitigated. The area to be cleared/disturbed is less than 1 acre. Therefore, a Stormwater NPDES permit will be not be necessary.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

There would be no permanent impervious surface.

Crushed rock or quarry spalls would be required to provide a firm surface for the drilling equipment and erosion resistant surface for the working area and access road. Upon completion of the coring, the well would be plugged with concrete per state regulations. The rock or quarry spalls would be removed and the site restored to approximate pre-drilling contours.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Much of the site would be covered with crushed rock or quarry spalls to resist erosion. The soil excavated from the "earth sump" would be mounded around the perimeter to provide additional containment.

Temporary erosion and sediment control measures (TESC) would be installed as needed at the drill site before work begins. In addition to using crushed rock or quarry spalls to resist erosion, other TESC methods used may include filter fabric fences, straw bale dikes, and heavy mulching.

The drill site would be monitored during drilling and testing by the site supervisor to ensure that proper measures are used to prevent erosion.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Fugitive dust from soil disturbance and exhaust from construction vehicles may be emitted during maintenance activities.

Equipment and/or vehicular exhaust would be generated on a short-term basis during the drilling operations. Diesel engines would be used to supply power for the drilling of the test borings.

Any natural gas that may be encountered during drilling or testing operations would be properly vented or safely flared.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

a. Proposed measures to reduce or control emissions or other impacts to air, if any:

If severe dust occurs, the appropriate areas would be watered down to control dust emissions.

Vehicles would be maintained according to manufacturer's specifications to minimize exhaust emissions

Any impacts to air quality would be short term for the duration of the drilling and testing of the well. The proposed project is not expected to have significant impacts to air quality.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The site location of the sites relative to streams is shown in Figure 2.

An unnamed stream flows approximately 900 ft southeast of the proposed project area. This stream flows into the Le Dout Creek, which is approximately 2,700 feet southwest of the site.

The National Wetlands Inventory (NWI) database was consulted to determine whether there were any known wetlands or other environmentally sensitive features in the area. According to the database, the closest wetland is 1700ft from the site. (Source: U.S. Fish and Wildlife Service. National Wetlands Inventory, 1987)

A Tetra Tech FW, Inc. biologist experienced in wetland identification visited the site on September 18, 2003, to investigate the presence of wetlands. No wetlands were identified within 300 feet of the proposed drill sites.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described
waters? If yes, please describe and attach available plans.

The core hole location would be located more than 300 feet from all surface water bodies (including wetlands).

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The site is not on a 100-year floodplain. The core hole will be drilled at approximately 2200 ft., the closest waterbody (Le Dout Creek) is at 1000 ft.

Source: The FEMA Digital Q3 Flood Data derived from FEMA Flood Insurance Rate Map available on-line. Internet Address: http://www.esri.com/hazards/makemap.html accessed on 9/24/2003.

The site is located on the border of a mapped volcano hazard zone for lahars with recurrence intervals of 500-1000 years. The core hole will be filled with concrete immediately following the completion of drilling operations. The entire duration of the project from commencement of drilling to filling the core hole will be no more than 120 days. Because of the timing, nature and location of the project, the risk to the project from a lahar from Mt. Rainier is small (less than 1:1000).

Sources:
1. Hazard zones for lahars, lava flows and phroclastic flows from Mount Rainier. US Geological Survey, Volcano Hazards Program. Internet Address: http://volcanoes.usgs.gov/About/Highlights/RainierPilot/Pilot_highlight.html
2. Pierce County Planning and Land Use Services Interactive Map Server. Internet Address: http://triton.co.pierce.wa.us/MapYourWay/index.cfm

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Small amounts of ground water may be encountered during the drilling of overburden soils. However, the drilling method involves sealing the

overburden soils by means of a steel casing. If ground water is encountered, it should be on the order of not more than 25 gallons per minute (gpm) for a short period of time as the ground water zone is fully penetrated by the solid steel casing.

Drilling water would be imported to the drill site from an approved commercial source. The drilling fluids would be recirculated during the drilling process. Recirculated drilling fluids would discharge from the pipe casing into an earth sump adjacent to the drill rig. The drilling fluid contains silt and clay-sized particles that rapidly "seal" the bottom of the mud pits. Any drilling fluids in the pit would be fresh water and/or state approverd inert additives. This water would stored on site within the pits.

1) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material would be discharged onto the ground.

Drilling fluids (primarily fresh water with bentonite mud) would be contained and recirculated in an earth sump at the site. No hazardous or toxic chemicals would be placed in the system. The primary element in the bentonite mud is bentonite clay (Anco Gel) with lesser amounts of addititves (Drispac Regular and Anco Drill A). Product descriptions for these materials are included as Attachment B in the Oil and Gas Drilling Permit Application.

After completion of the test drilling, the drilling fluids would be tested to certify that fluids are within acceptable levels for reclamation of the reserve pits.

A portable toilet would be maintained at the site during drilling operations. When the project is completed, the toilet will be removed from the site.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff from the site would be only a temporary phenomenon. Surface runoff from recently graded and exposed areas is possible during rain events, however sediment from the runoff is not likely to leave the site due to in-place sediment controls.

No stormwater is expected to enter directly into surface water bodies or other waters.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. Any waste material generated by the project would be disposed of off site at an appropriate disposal facility. No waste materials are expected to enter the ground or surface water.

As with any maintenance or construction project there is a risk of fuel spills or leaks. Equipment, such as service trucks and worker vehicles, would be fueled off site. Only the drilling equipment would be fueled on site using proper procedures to prevent accidental spills. A spill kit, including fuel absorbent pads, would be on site at all times.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The proposed drill site would be reviewed before and during drilling operations. TESC measures would be installed as needed to control water runoff. An erosion control specialist will inspect the site.

4. **Plants**

a. Check or circle types of vegetation found on the site:

__x__ deciduous tree: **alder**, maple, aspen, other

__x__ evergreen tree: **Douglas fir**, cedar, pine, **western hemlock**

__x__ shrubs: **salal, Oregon grape**

__x__ grass

_____ pasture

_____ crop or grain

_____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

_____ water plants: water lily, eelgrass, milfoil, other

_____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

All vegetation would be removed from the proposed site, up to 0.9 acres.

The area has been clear-cut recently. The vegetation on site is herbaceous and shrub cover that is common in recently clear-cut areas.

c. List threatened or endangered species known to be on or near the site.

There are no significant natural features, rare plants or high quality ecosystems onsite according to the Washington Natural Heritage Program database. (Reference: Washington State Department of Natural Resources, Washington Natural Heritage Program, GIS, 2002.) Errors have been documented in the Washington Natural Heritage 2003 data set, hence the use of the 2002 data set.

The areas to be cleared of vegetation consist of species located throughout the region. Based on existing conditions at the site, there should be no impact to threatened or endangered plant species.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

After the testing is completed and if production is not pursued, the drill site would be cleared of the rock and returned to approximately the pre-existing contours. It would be planted with a mix of Douglas fir/western hemlock or as specified by the landowner.

5. **Animals**

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk,** heron, eagle, **songbirds,** other:
mammals: **deer**, bear, **elk**, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

A search of the Washington Department of Fish and Wildlife (WDFW) Priority Habitats Species Database is currently being queried to identify the presence of threatened and endangered wildlife species within the vicinity of the project. Results of this query will be provided to the DNR upon receipt from WDFW.

c. Is the site part of a migration route? If so, explain.
No.

Proposed measures to preserve or enhance wildlife, if any:
After the testing is completed, the drill site would be returned to approximately the pre-existing contours. It would be planted with a mix of Douglas fir/Western hemlock or as specified by the landowner.

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Diesel generators would be used to provide energy to the drilling equipment.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
No energy conservation features are needed since there would be only a small amount of diesel fuel consumed at the drilling site. No other impacts to utilities are expected.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
As with any drilling project, there is a risk of fuel spills or leaks. Potential hazards include natural gas encountered while drilling, spills of fuel being delivered for rig operations and personnel safety around the drilling equipment. These risks are controlled by:

- **Providing adequate pressure control equipment on the drill rig.**
- **Regular equipment testing and inspection**
- **Adherence to DNR regulations and standard industry drilling practices.**
- **Temporary erosion and sediment control measures would be installed as needed and monitored during drilling.**

1) Describe special emergency services that might be required.

Fire protection and emergency medical service.

2) Proposed measures to reduce or control environmental health hazards, if any:
The site is on private property accessed by gated and locked roads to prevent public access.

Blowout prevention equipment would be employed during drilling as a safety precaution.

This project would proceed in accordance with applicable government regulations associated with environmental and health hazards. This would include all operational procedures such as worker safety, equipment maintenance and drilling methods.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Typical drilling noise would be generated for 24 hours a day and 7 days a week during the test well drilling.

3) Proposed measures to reduce or control noise impacts, if any:

The diesel generators used on the proposed site would be equipped with exhaust silencers.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties?

The land is privately owned and is used for forestry.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

The current zoning classification is Forest Land (available on-line www.pierce.wa.us; accessed 9/22/2003).

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation is Forest Land

g. If applicable, what is the current shoreline master program designation of the site?

The site is not located in a Shoreline of the State.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

None known.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:
Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The land is privately owned forestry land. The proposed drilling project is compatible with current zoning and with known plans.

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.

c. Proposed measures to reduce or control housing impacts, if any:
None.

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
There are no permanent structures as part of the proposed plan.

The drilling equipment would be on site during drilling activities. It has a mast that is approximately 124 feet high. There would also be temporary a chemical toilet and two site trailers that would be less than 10 feet tall and on site for the duration of test well drilling.

b. What views in the immediate vicinity would be altered or obstructed?
The proposed site is within privately owned forestland that has been clear cut and is in varying stages of secondary growth. The site is in a recent clear cut that is bordered by older second growth and is shielded from public viewing by trees.

c. Proposed measures to reduce or control aesthetic impacts, if any:
The site is only visible from the private logging roads on the property. The structures are all temporary and on site for the duration of the core hole operations.

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Lights would be used for drilling crew safety since the drilling would occur 24 hours a day, 7 days a week. They would be used only for the actual drilling that lasts less than 60 days. Production testing is monitored during daylight hours and lights are not needed.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:
None. Lights would be on site temporarily during drilling of the test well. The proposed drill site is located in an area that is surrounded by forest and would be shielded from view by trees.

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?
There are no designated recreational opportunities in the immediate vicinity. Since the land is actively logged, the access roads are gated and locked to prevent public access. Access to the site is controlled through locked gates.

Hunters occasionally have access to the property. The drilling operations should not interfere with hunting activities because the site is on a spur road.

b. Would the proposed project displace any existing recreational uses? If so, describe.
No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None.

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
A Tetra Tech FW staff archaeologist visited the State Office of Archaeology and Historic Preservation and found no known archaeological sites and archaeological surveys in the vicinity of the project area. The search included one mile around the radius of the proposed well site. Although no surveys have been completed it is highly unlikely that any sites exist in the area. The proposed drill site in on Rainer Timber Company land and has been recently clear-cut.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None known.

c. Proposed measures to reduce or control impacts, if any:
None.

14. **Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
The site is accessed by privately owned logging roads. State Route 165 is east of the proposed site and provides access to the private logging roads through a locked gate.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No improvements to existing roads are needed.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Vehicular trips would be made by the workers to the site during drilling of the core hole. During drilling, there are three shifts of approximately five workers.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. **Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

The proposed drilling site is on undeveloped land.

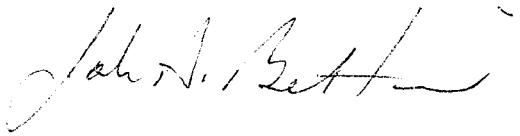
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:



John A. Bettridge
Operations Manager
Duncan Oil, Inc.

Date Submitted: September 25, 2003

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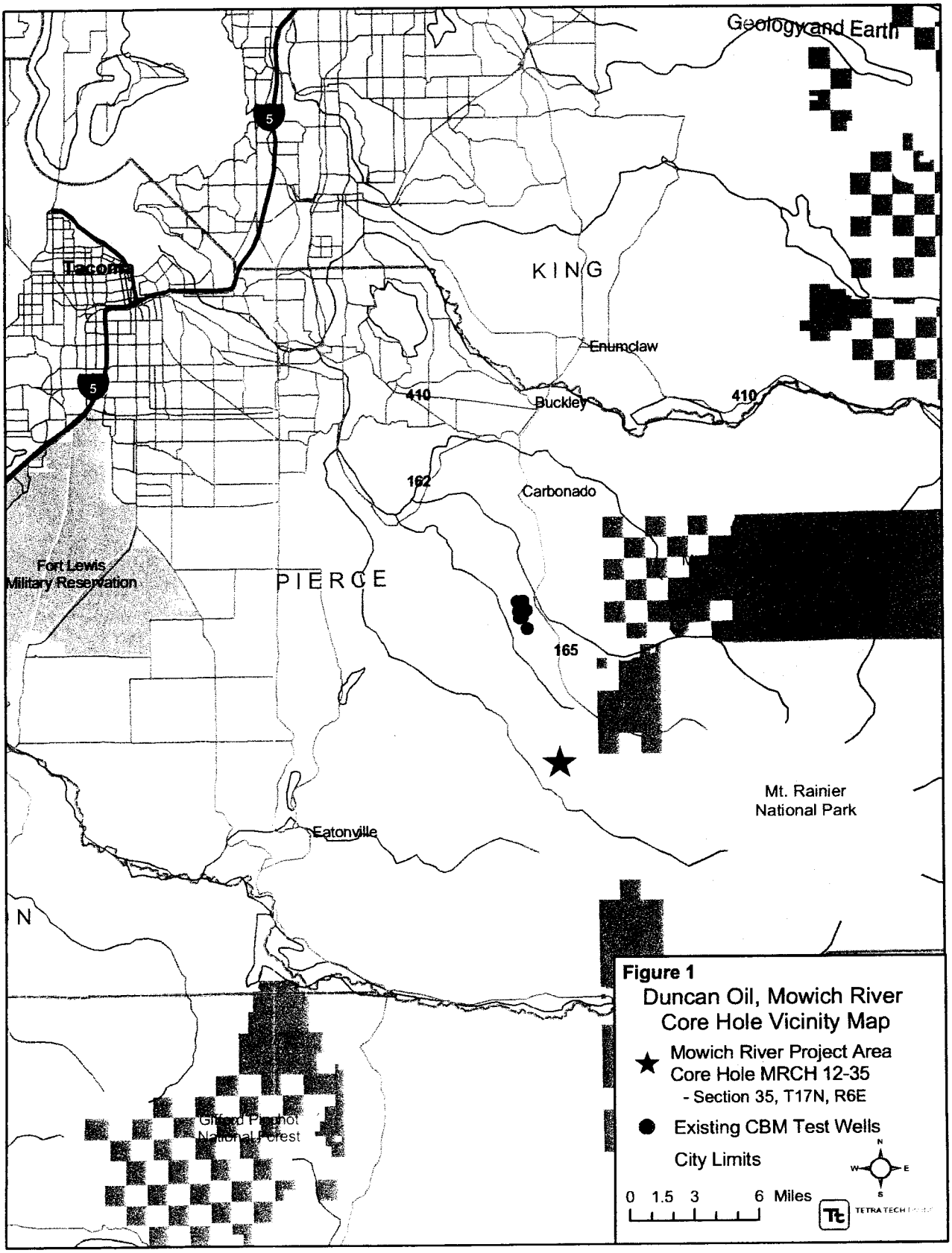

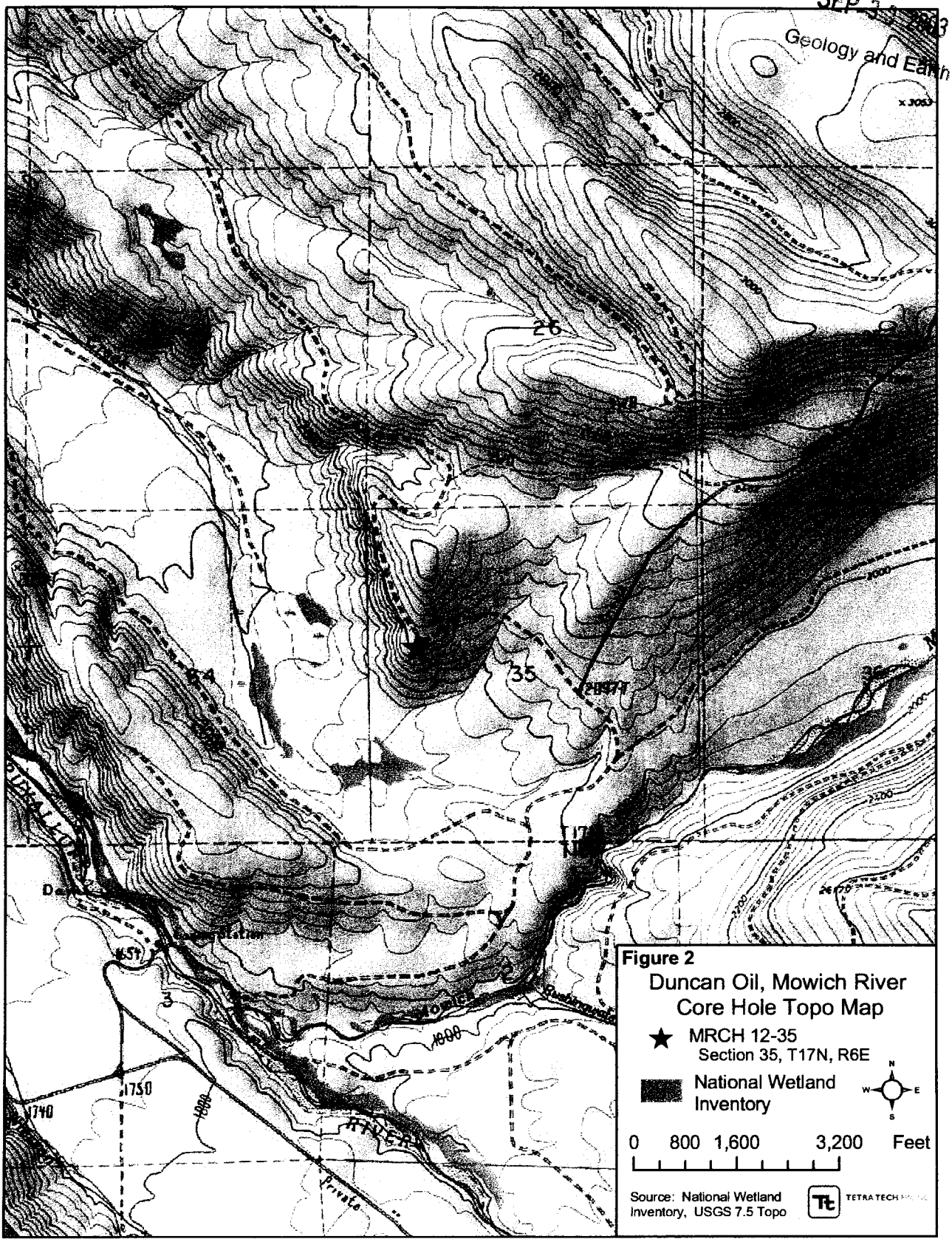

Figure 2

Duncan Oil, Mowich River Core Hole Topo Map

★ MRCH 12-35
Section 35, T17N, R6E

National Wetland Inventory

N W E S

0 800 1,600 3,200 Feet

Source: National Wetland Inventory, USGS 7.5 Topo

TETRA TECH